

### **AMENDMENTS TO THE DRAWINGS**

The attached two sheets of drawings include a change to FIG. 2 and new FIG. 7. The sheet, which includes FIG. 2, replaces the original sheet including FIG. 2, and the sheet, which includes FIG. 7, adds FIG. 7 to the original drawings.

Attachment: Two Sheets of Drawings

## **REMARKS**

Reconsideration of the application is respectfully requested.

### **I. Status of the Claims**

Claim 1 has been canceled without prejudice or disclaimer.

Claims 2-4 and 6 have been amended without the introduction of new matter.

Claims 7-9 have been added without the introduction of new matter.

Claim 2-9 are pending.

### **II Status of the Drawings**

The drawings have been objected to under 37 CFR 1.83(a). Applicants have corrected FIG. 2 to delete the indication of the line III-III. Accordingly, the Brief Description of the Several Views of the Drawings at page 7, lines 20 and 21 has been amended to described FIG. 3 as a cross-sectional representation of the first housing and the second housing of the steering apparatus shown in FIG. 2. Further, a new FIG. 7 is added to show a perspective view of the structure of a second energy absorbing ring of the steering apparatus according to another embodiment of the present invention described in the present specification at page 16, lines 13-24. No new matter is added. Therefore, Applicants respectfully request that the objection to the drawings be withdrawn.



In such embodiment shown in FIG. 7, because the second housing has the impact energy absorbing protrusions 8 and 9, it is necessary for the second impact energy absorbing ring 7 to include non-contact pathways. Thus, the ring 7 has the ring portion 77b and the plate pieces 77a, and thereby the non-contact pathways are formed. Accordingly, an internal radius  $\Gamma_A$  of the portion of the ring portion where no plate piece is provided is equal to or larger than an internal radius of the first housing an end face of which contacts the ring portion. Therefore, amended Claim 4 is definite.

Accordingly, Applicants respectfully request that the rejections of Claims 1-6 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim 1 has been rejected as unpatentable under 35 U.S.C. § 103(a) over JP 2000-219139 (herein “JP ‘139”) in view of Kim et al. (U.S. Patent No. 6,109,652, herein “Kim”). Claims 2-6 has been rejected as unpatentable under 35 U.S.C. § 103(a) over JP ‘139 in view of Kim , and further in view of Cooper (U.S. Patent No. 3,877,319). Applicants respectfully traverse the rejections.

Claim 2 has been rewritten in independent form and amended to correct minor informalities. Amended independent Claim 2 recites the features of the plurality of the first impact energy absorbing protrusions, the plurality of second impact energy absorbing protrusions, and two impact energy absorbing rings. Amended Claim 2 also recites that “one of the impact energy absorbing

rings has a ring portion to contact with an end face of one of the first housing and the second housing, and a plurality of plate pieces are disposed continuously with the ring portion separately from each other in a circumferential direction at intervals corresponding to the impact energy absorbing protrusions.”

The outstanding Office Action recognizes that JP ‘139 and Kim, either taken individually or in combination, do not disclose the rings having plate pieces spaced around protrusions. However, the outstanding Office Action asserts that Cooper discloses “an impact energy ring having a ring portion to contact with an end face of a housing and a plurality of plate pieces disclosed continuously with the ring portion separate from each other at intervals corresponding to impact energy absorbing protrusions (78).”

In contrast, the present invention as recited in amended Claim 2 is distinguishable over the combined teachings of JP ‘139, Kim and Cooper because Cooper merely describes the steering column assembly that includes the housing having only the first impact absorbing protrusions, and one impact absorbing ring. Cooper does not describe the second impact absorbing protrusions and the second impact absorbing ring, as recited in amended Claim 2. Thus, even if Cooper is combined with JP ‘139 and Kim, the combined teachings of the references do not disclose all of the limitations recited in amended Claim 2, specifically two different kinds of the impact absorbing rings included in one housing assembly, one of which has a ring portion to contact with an end face of one of the first housing and the second housing, and a plurality of plate pieces disposed continuously with the ring portion separately from each other in a circumferential direction at intervals corresponding to the impact energy absorbing protrusions.

Turning now to new independent Claim 7, it includes features similar to those recited in amended independent Claim 2. Thus, the present invention recited in Claim 7 is distinguishable over the combined teachings of the cited references at least for the above reasons advanced for amended Claim 2.

In this regard, none of the cited references in the outstanding Office Action, either taken individually or in combination, discloses the above features of the plate pieces which are disposed continuously with the ring portion spaced from each other in a circumferential direction at intervals *providing gaps between the plate pieces* and which correspond to the impact energy absorbing protrusions, as recited in Claim 7. Specifically, with regard to Cooper, Cooper merely shows in Fig. 5 the integral annular flange 100, plate pieces of which are spaced from each other in a circumferential direction at intervals without providing gaps between the plate pieces.

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## CONCLUSION

The Examiner is respectfully requested to contact the undersigned at the telephone number indicated below once he has reviewed the proposed amendment if the Examiner believes any issue can be resolved through either a Supplemental Response or an Examiner's Amendment.

Respectfully submitted,

By

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